

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 8117917/PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SG 2004/000277	International filing date (<i>day/month/year</i>) { FORMTEXT	Priority Date (<i>day/month/year</i>) 18 September 2003 (18.09.2003)
International Patent Classification (IPC) or national classification 2 September 2004 (02.09.2004) IPC⁸: A61F 7/08 (2006.01); A61M 37/00 (2006.01)		
Applicant EWE, CHOR EE et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examination Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 8 sheets.

3. This report contains indications relating to the following items:
 - ☒ Basis of the opinion
 - ☐ Priority
 - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Lack of unity of invention
 - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Certain documents cited
 - ☐ Certain defects in the international application
 - ☒ Certain observations on the international application

Date of submission of the demand <div style="text-align: center;">31 March 2005 (31.03.2005)</div>	Date of completion of this report <div style="text-align: center;">7 November 2007 (07.11.2007)</div>
Name and mailing address of the IPEA/AT Austrian Patent Office Dresdner Straße 87 A-1200 Vienna Facsimile No. 1/53424/200	Authorized officer <div style="text-align: center;">KÖNIG H.</div> Telephone No. 1/53424/339

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International application No.
PCT/SG 2004/000277**I. Basis of the report**1. With regard to the **elements** of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages 1-5, 7, as originally filed
pages _____, filed with the demand
pages 6, 8-10, filed with the letter of 15 July 2005 (15.07.2005).
- ☒ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement) under Article 19
pages _____, filed with the demand
pages 11-14, filed with the letter of 15 July 2005 (15.07.2005).
- ☒ the drawings:
pages 1/5-5/5, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____.
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____.
- ☐ the claims, Nos. _____.
- ☐ the drawings, sheets/fig _____.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as „originally filed“ and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement	Novelty (N)	Claims 1-7	YES
		Claims ----	NO
Inventive step (IS)		Claims 1-7	YES
		Claims ----	NO
Industrial applicability (IA)		Claims 1-7	YES
		Claims ----	NO

Citations and explanations (Rule 70.7)

With letter from 15 July 2005 the applicant submitted amended claims.

Features of the herbal applicator of claim 1 have changed with respect to the originally filed application. In addition to features already filed:

- flexible main housing;
- flexible heater pad connected to power source;
- adjustable temperature controller for flexible heater pad;
- herbal pack retainer;

the feature - originally representing claim 2 - was added to features of claim 1:

- flexible main housing made up of two sections - a top section with strap means for strapping the applicator onto the body and a bottom section, onto which the flexible heater pad is affixed by an attachment means.

This report has been established on those amended claims.

Following documents have been cited in the International Search Report:

- D1: JP 6296658 A (MORISHIYOU) 25.10.1994
- D2: GB 427795 A (MOOS) 23.04.1935
- D3: DE 19536652 A1 (KIRSCHKE) 10.04.1997

D1 discloses a flexible main housing (mat [10]) with a planar flexible heater pad (11) inserted for electrical heating of herbs (moxa), which can be directly applied to the skin. A flat herbal retainer (12) filled with moxa is arranged adjacent to the flexible heater pad, which is controlled by a timer (30). The herbal retainer can be easily exchanged after use.

D1 does neither show a flexible main housing made up of two sections nor a temperature regulator.

D2 discloses an electrically heated surgical compress comprising a pad (a) containing a paraffin mixture having embedded in it a heating element (b) equipped with a regulator (d) connected to a suitable electrical source, and being further characterized by a cover (g) of porous material.

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box V (page 1)

Medicinal substances or herbs may be added to the paraffin mixture.
D2 does neither show a flexible main housing made up of two sections nor an herbal pack retainer.

Therefore documents D1 and D2 do not anymore render claim 1 obvious.

D3 discloses a compress for heat therapy treatment. Showing only means for applying and fixing aromatic material to body regions, D3 is considered of no particular relevance to claims 1 and 7.

In summary, subject matter of claim 1 and method of claim 7 meet the criteria of novelty and inventive step.

Features of dependent claims 2-6 are neither known from nor rendered obvious by prior art documents D1-D3.

Industrial applicability is given for all claims.

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VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The expression "curie temperature" disclosed in claims 1,7 (and also in the description) is in context of the subject matter of the present patent application still unclear.

The Curie point (T_c), or Curie temperature, is a term in physics and materials science, named after Pierre Curie, and refers to a characteristic property of a ferromagnetic or piezoelectric material. For a certain iron-oxide FeOFe_2O_3 , for instance, it is 858 Kelvin.

adjustable and flexible thermal herbal applicator that can be easily attached on to the body and following the contours of the body so as to effectively administer the heated herbs directly to the skin .

To achieve the foregoing objectives and in accordance with the
5 invention as embodied and broadly described herein, the present invention comprises of a flexible main housing to trap the heat within, preferably made up of two sections, (i) a top member fixed with a strap retainer means for attaching on to a strap means for strapping on to the body, (ii) a bottom member for holding the flexible flat
10 heater pad affixed to an Attachment Means, preferably a Velcro tape that connects to a corresponding Velcro tape that affixed on to a herbal pack retainer which in turn helps to hold the herbal pack in place , so that the same may be easily removed and replenished with a new herbal pack as and when desired. The heater pad is connected by
15 a cable to an electrical power source wherein its temperature can be controlled by an electrical controller means.

Brief Description of the Drawings

A more complete appreciation of the invention and many of the attendant advantages thereof will be readily obtained as the same
20 becomes better understood by reference to the following detailed

This invention has a structure that comprises of the following parts as shown in Figure 1 and Figure 2 :-

(i) a flexible Main Housing (1) for better retainer of heat made of flexible material formed with two sections :-

5 **(a) a top flexible Main Housing Member (1a) which helps to prevent the heat generated from being dispersed to the outside with a Strap Retainer Means (2) for attaching to a Strap Means (3) for strapping on to a part of the body.**

10 **(b) a bottom flexible Main Housing Member (1b) which helps to contain the heat generated with a flexible flat Heater Pad (4) for generating the heat, positioned at its bottom and affixed with an Attachment Means (5a) e.g. a Velcro tape, The flexible flat Heater Pad (4) is joined by an electrical Cable (6) which connects to an electrical Power Source (7) that is controlled by a Temperature Regulator (8)**
15 **for regulating the required temperature,**

(ii) a flexible Herbal Pack Retainer (9) which is affixed with a corresponding Attachment Means (5b) e.g. a velcro tape that is to be connected on to the Attachment Means (5a) that is affixed on the Heater Pad (4),

(iii) a Herbal Pack (10) for containing the herb or herbs, is to be strapped in between the Heater Pad (4) and a Herbal Pack Retainer (9) and held on by the Attachment Means (5a, 5b) so that the flexible Herbal Pack Retainer (9) which is to hold the Herbal Pack (10) in place resulting in such a way that the Herbal Pack (10) is in direct contact with the Heater Pad (4) on one side and the Herbal Pack Retainer (9) on the other side, such that the Herbal Pack Retainer (9) is in direct contact with the skin of the body, when the apparatus is in use. The Herbal Pack Retainer (9) also serves to absorb part of the heat and helps to reduce the vapourizing temperature to a curie temperature, which is at the range of 40 °C. – 60 °C. (a temperature that has been found to be not harmful to human body in hyperthermia and moxibustion remedy. At this time, because moxibustion temperature required to body may be different according to diathesis of the person, the heat temperature is variable in such range) and at the same time is made of permeable material to allow the herbal essence to permeate into the skin.

The entire assembly is as shown in Figure 2. which is an exploded perspective view of the present invention, with all the parts arranged in order of assembly. Figure 3 shows the cross-section of the

invention with the relevant parts arranged in order of assembly and in contact with the skin of the body.

The heat generated and applied on the herbs contained in the Herbal Pack (10) would release the herbal essence which would then permeate through the thin membrane of the Herbal Pack Retainer (9) and thereby cause an infusion of herbal essence penetrating deep into the skin as illustrated clearly in Figure 4.

When in use, the parts are arranged, assembled and all strapped together as shown in Figure 5 and are finally applied directly to that part of the body where the herbs are to be administered, for example, to the upper arm of the person, as shown in Figure 6.

The present invention has been described in detail. However it is to be understood that the detailed description and the specific examples, while indicating preferred embodiments of the invention , are given by way of illustration only, since various changes and modifications within the ambit and scope of the invention will become apparent to those skilled in the art from this detailed description.

CLAIMS

1. A herbal applicator for the application of herbs that is to be heated and applied directly on to the skin of the body comprises of a flexible Main Housing (1) which can be easily attached on to the
5 body, is affixed with a flexible Heater Pad (4) that connects to an electrical Power Source (7) to be regulated by an adjustable Temperature Controller (8) characterized in that the flexible Main Housing (1) is made up of two sections, a top flexible Main Housing Member (1a) where the Strap Means (3) is located and a bottom
10 flexible Main Housing Member (1b) where the flexible Heater Pad (4) is located, such that the top flexible Main Housing Member (1a) helps to prevent the heat generated by the Heater Pad (4) from being dispersed to the outside, whereas the bottom flexible Main Housing Member (1b) helps to contain the heat generated by the Heater Pad (4)
15 within to heat the herbs effectively and wherein the said flexible Heater Pad (4) rests on a Herbal Pack (10) which is in turn retained by a flexible Herbal Pack Retainer (9) made of a permeable material and built in such a way as to allow easy removal of the Herbal Pack (10) for replenishment, wherein when the herbs inside the Herbal
20 Pack (10) are heated, until they vaporize, the Herbal Pack Retainer

(9) then will allow the vaporized herbal essence to permeate through it and onto the skin and at the same time absorb part of the heat and helps to reduce the vaporizing temperature to a curie temperature.

2. A herbal applicator as claimed in Claim 1 wherein the
5 Heater Pad (4) is affixed with an Attachment Means (5a) and a corresponding Attachment Means (5b) is affixed on to the Herbal Pack Retainer (9), the said Attachment Means (5a, 5b) is to facilitate easy removal and attaching of the Herbal Pack (10).

3. A herbal applicator as claimed in Claim 2, wherein the
10 Attachment Means (5a, 5b) is a set of velcro tape.

4. A herbal applicator as claimed in Claim 1, wherein the electrical Power Source (7) is a portable battery. 5. A herbal applicator as claimed in Claim 1, wherein the Temperature Regulator (8) is for regulating the required temperature of the Heater Pad (4) in
15 order for it to vapourize the herbs contained in the Herbal Pack (10).

6. A herbal applicator as claimed in Claim 1 wherein the flexible Main Housing (1) is made of a flexible material, that easily adapts to the contours of the body.

7. A method of administering herbs on to the skin of the body by
20 heating the herbs until they vapourize, is by using a devise that

comprises of a flexible Main Housing (1), which can be easily attached on to the body, and affixed with a flexible Heater Pad (4) that is connected to an electrical Power Source (7) to be regulated by an adjustable Temperature Controller (8) characterized, in that the

5 flexible Main Housing (1) is made up of two sections, a top flexible Main Housing Member (1a) where the Strap Means (3) is located and a bottom flexible Main Housing Member (1b) where the flexible Heater Pad (4) is located, such that the top flexible Main Housing Member (1a) helps to prevent the heat generated by the Heater Pad

10 (4) from being dispersed to the outside, whereas the bottom flexible Main Housing Member (1b) helps to contain the heat generated by the Heater Pad (4) within to heat the herbs effectively and wherein the said flexible Heater Pad (4) rests on a Herbal Pack (10) which is in turn retained by a flexible Herbal Pack Retainer (9) made of a

15 permeable material and built in such a way as to allow easy removal of the Herbal Pack (10) for replenishment, wherein when the herbs inside the Herbal Pack (10) are heated, until they vaporize, the Herbal Pack Retainer (9) then will allow the vapourized herbal essence to permeate through it and onto the skin and at the same time

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absorb part of the heat and helps to reduce the vapourizing
temperature to a curie temperature.

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